Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

1-35. (Cancelled)

36. (Currently Amended) A rotary spindle assembly comprising a rotary drive motor, a rotary spindle, a wafer support, a wafer processing bowl, a heat regulating flange, and a heat regulating element, wherein:

said wafer support is secured to said rotary spindle so as to be rotatable with said spindle;

said rotary spindle defines a lower spindle area and an upper spindle area;

said rotary spindle is mechanically coupled to said rotary drive motor in said lower spindle area;

said heat regulating flange is positioned in said lower spindle area;

said heat regulating element is positioned in said upper spindle area between said heat regulating flange and said wafer support such that ;

~~said heat regulating element comprises~~ a fluid conduit disposed in said heat regulating element and configured to transport a fluid therethrough defines ~~defining~~ a substantially cylindrical heat regulation void about a portion of said rotary spindle in said upper spindle area, said heat regulation void thermally coupled to said fluid conduit such that upon passage of said fluid through said fluid conduit and exhaust gas through said heat regulation void, an exchange of heat occurs therebetween; and

said heat regulating element defines an open framework arranged about said rotary spindle such that upper and lower ends of said heat regulating element are open to said substantially cylindrical heat regulation void from said lower spindle area to said upper spindle area~~; and~~

~~dimensions of said cylindrical heat regulation void defined by said heat regulating element are established so as to permit flow of exhaust gases from said lower spindle area beyond said lower end of said heat regulating element through said upper spindle area beyond said upper end of said heat regulating element~~.

37. (Cancelled)

38. (Cancelled)

39. (Previously Presented) A rotary spindle assembly as claimed in claim 36 wherein said heat regulating flange further comprises a temperature sensor positioned within said flange body proximate said rotary spindle passage.

40. (Previously Presented) A rotary spindle assembly as claimed in claim 39 wherein said rotary spindle assembly further comprises:

at least one liquid source coupled to said fluid conduit; and

a controller coupled to said at least one liquid source and said temperature sensor, said controller being programmed to be responsive to a temperature signal generated by said temperature sensor.

41. (Currently Amended) A rotary spindle assembly as claimed in claim 39 wherein said temperature sensor is positioned within a bore defined within said flange ~~body;~~ body.

42. (Previously Presented) A rotary spindle assembly as claimed in claim 41 wherein said bore extends from an outer periphery of said flange body to an inner periphery of said flange body proximate a rotary spindle passage defined in said flange body.

43. (Cancelled)

44. (New) A rotary spindle assembly comprising:

a rotary drive motor;

a rotary spindle rotatably responsive to said rotary drive motor;

a wafer support secured to said rotary spindle so as to be rotatable therewith;

a heat regulating flange positioned between said rotary drive motor and said wafer support; and

a heat regulating element positioned between said heat regulating flange and said wafer support, said heat regulating element comprising:

a frame disposed about said rotary spindle; and

a fluid conduit coupled to said frame such that a heat regulation void is defined between said spindle and said fluid conduit, said heat regulation void thermally coupled to said fluid conduit such that upon passage of said fluid through said fluid conduit and upon passage of an exhaust gas through said heat regulation void, an exchange of heat occurs between said exhaust gas and said fluid.

45. (New) A rotary spindle assembly as claimed in claim 44 wherein said fluid conduit is disposed within said frame to define a substantially cylindrical shape to said heat regulation void.

46. (New) A rotary spindle assembly as claimed in claim 45 wherein said fluid conduit is disposed within said frame in a substantially circumferential path.